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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/608,871

06/27/2003

John M. de Larios

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05/16/2007

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EXAMINER

STINSON, FRANKIE L

ART UNIT

PAPER NUMBER

1746

MAIL DATE

DELIVERY MODE

05/16/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/608,871

Applicant(s)

DE LARIOS

Examiner

FRANKIE L. STINSON

Art Unit

1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 March 2007.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23, 25-32 and 34-37 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-23, 25-32 and 34-37 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

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1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-23, 25-32 and 34-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Kittle (U. S. Pat. No. 6,090,217). In view of Patel et al. (U. S. pat. App. Pub. No. 2003/0171239).

Re claims 1, 13, 20 and 30, note that Kittle discloses a method/apparatus for removing a layer from a substrate surface, comprising:

providing at least one encapsulating transport (foam/bubble), the encapsulating transport containing at least some reactive gas ("air" and "other gases" col. 6, lines 18-24);

applying the at least one encapsulating transport to the layer, the layer being a chemically reactive layer (note the substrate is "chemically treated", col. 5, line 43); and

wherein the encapsulating transport ruptures on the chemically reactive layer and releases the reactive gas onto the chemically reactive layer to facilitate removal of the layer from the substrate surface. Also note the reducing agent (40, DI water), the organic material (col. 1, lines 47-62), the oxygen, nitrogen and argon in that air is composed of these gases and other gases (see "Air Composition", PHYSLINK.COM, see attached), the mixer (36), the application unit being a container (18 see fig. 7) and the sparger (see fig. 8, 9) that differ from the claims only in the recitation of the reactive gas including ozone. Patel (see paragraph 0114) discloses that it is old and well known

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to employ an encapsulant (foam-based cleaning material) where the same includes a reactive gas namely ozone. It therefore would have been obvious to one having ordinary skill in the art to modify the encapsulation transport in Kittle, to include ozone as taught by Patel, since Kittle discloses that other gases may be employed as noted above. Ozone is widely used in the semiconductor art to enhance the treatment process due to the active free radical. Re claims 2-12, 14-19, 21-23, 25-29, 31, 32 and 34-37, Kittle and Patel disclose the gases bubbles, and other fluids as claimed

3. Applicant's arguments with respect to the pending claims have been considered but are moot in view of the new ground(s) of rejection.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to FRANKIE L. STINSON whose telephone number is (571) 272-1308. The examiner can normally be reached on M-F from 5:30 am to 2:00 pm and some Saturdays from approximately 5:30 am to 11:30 am.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr, can be reached on (571) 272-1700. The fax phone number for the organization where this application or proceeding is assigned is 571-272-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

fls

A handwritten signature in black ink, appearing to read "Frankie L. Stinson". The signature is stylized with a large, looped "F" and "S".

FRANKIE L. STINSON  
Primary Examiner  
GROUP ART UNIT 1746